

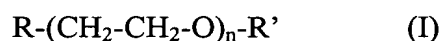
AMENDMENTS TO THE CLAIMS

1. (Currently Amended): An oil-in-water nanoemulsion, comprising:
 - an oily phase dispersed in an aqueous phase;
 - (i) at least one amphiphilic lipid selected from the group consisting of nonionic amphiphilic lipids, anionic amphiphilic lipids, and combinations thereof; and
 - (ii) at least one water-soluble nonionic polymer selected from the group consisting of homopolymers and copolymers of ethylene oxide having a molar mass equal to or greater than 10,000 g/mol; polyvinyl alcohols; homopolymers and copolymers of vinylpyrrolidone; homopolymers and copolymers of vinylcaprolactam; homopolymers and copolymers of polyvinyl methyl ether; neutral acrylic homopolymers and copolymers; C₁-C₃ alkyl guar; C₁-C₃ hydroxyalkyl guar; and combinations thereof; wherein the at least one water-soluble nonionic polymer is free of hydrophobic chains;
 - wherein a ratio of the weight of said oily phase to the weight of said amphiphilic lipid (i) ranges from 1.2 to 10;
 - and wherein said oily phase comprises oil globules having a number-average size of less than 100 nm, wherein the water-soluble nonionic polymer is present in a nanoemulsion thickening effective amount.
2. (Original): The nanoemulsion according to Claim 1, wherein said ratio ranges from 2 to 6.
3. (Original): The nanoemulsion according to Claim 1, wherein the oil globules have a number-average size ranging from 20 to 80 nm.
4. (Original): The nanoemulsion according to Claim 1, having a viscosity ranging from 1 to 200 Poises when measured at 25°C at 200 s⁻¹.

5. (Original): The nanoemulsion according to Claim 1, having a turbidity ranging from 60 to 400 NTU.

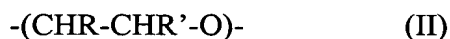
6. (Previously Presented): The nanoemulsion according to Claim 1, wherein said nanoemulsion comprises at least one homopolymer or copolymer of ethylene oxide and said homopolymer or copolymer of ethylene oxide is selected from the group consisting of:

(1) poly(ethylene oxides) having the following formula (I):



in which R is selected from the group consisting of hydroxyl, methoxy and amine group, R' is a methyl group or a hydrogen, and n is a number ranging from 220 to 230,000;

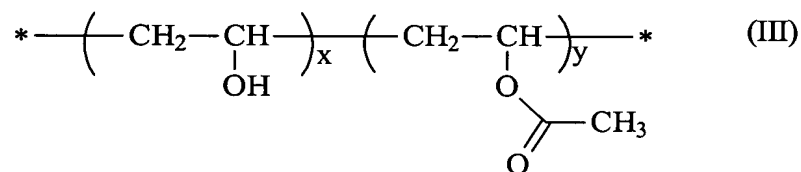
(2) copolymers of ethylene oxide and of one or more oxyalkylenated monomers having the following formula (II):



in which R and R', independently of each other, are hydrogen or an alkyl group comprising from 1 to 7 carbon atoms, at least one of R or R' being an alkyl group; and

(3) combinations thereof.

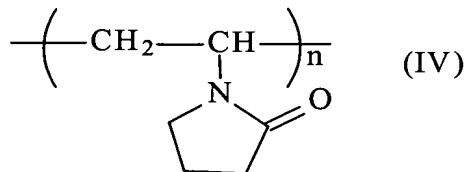
7. (Previously Presented): The nanoemulsion according to Claim 1, wherein said nanoemulsion comprises at least one polyvinyl alcohol and said polyvinyl alcohol is a compound having the following formula (III):



in which x is a mean number expressed as a percentage ranging from 70 to 100; and y is a mean number equal to 100 - x..

8. (Previously Presented): The nanoemulsion according to Claim 1, wherein said nanoemulsion comprises at least one homopolymer or copolymer of vinylpyrrolidone and said homopolymer or copolymer of vinylpyrrolidone is selected from the group consisting of:

polyvinylpyrrolidones having the following formula (IV):

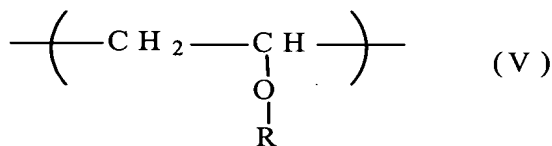


copolymers of vinylpyrrolidone and vinyl acetate;

copolymers of vinylpyrrolidone and vinylpyrrolidone compounds having butene grafts;

copolymers of vinylpyrrolidone and malefic anhydride;

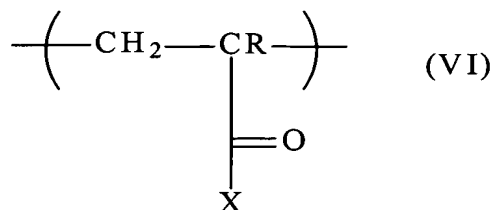
copolymers of vinylpyrrolidone with polyvinyl alkyl ethers of the following formula (V):



in which R is selected from the group consisting of alkyl groups having from 1 to 7 carbon atoms;

copolymers of vinylpyrrolidone and N-vinyl lactams;

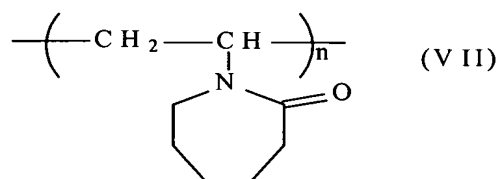
copolymers of vinylpyrrolidone with neutral acrylic derivatives of the following formula (VI):



in which R is hydrogen or a methyl group, and X is selected from the group consisting of alkyl oxide having the formula OR' where R' is an alkyl group having 1 to 7 carbon atoms; hydroxylated and/or aminated alkyl oxide having the formula $\text{OR}_1(\text{OH})_n(\text{NR}_2\text{R}_3)_m$ where n and m are each independently numbers ranging from 0 to 10, R₁ is an alkyl group having 1 to 7 carbon atoms; R₂ and R₃ are each independently hydrogen or an alkyl group such that the sum of the carbon atoms of R₂ and R₃ ranges from 1 to 7; primary, secondary or tertiary amine having the formula NR_2R_3 where R₂ and R₃ have the meaning indicated above.

9. (Previously Presented): The nanoemulsion according to Claim 1, wherein said nanoemulsion comprises at least one homopolymer or copolymer of vinylcaprolactam and said homopolymer or copolymer of vinylcaprolactam is selected from the group consisting of:

(1) polyvinylcaprolactams which have the following formula (VII):

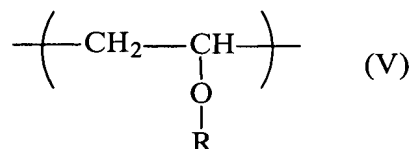


;

(2) copolymers of vinylcaprolactams obtained from vinylcaprolactam and one or more of the following monomers:

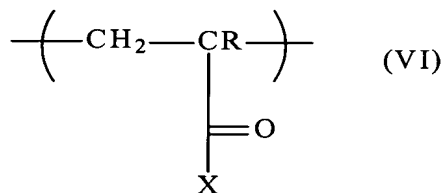
-vinyl acetate;

- N-vinyl lactam;
- maleic anhydride;
- vinyl alkyl ethers of formula (V);



in which R is selected from the group consisting of alkyl groups containing from 1 to 7 carbon atoms;

- neutral acrylic derivatives of formula (VI)



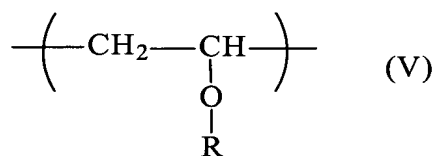
in which R is hydrogen or a methyl group, and X is selected from the group consisting of alkyl oxide having the formula OR' where R' is an alkyl group having 1 to 7 carbon atoms; hydroxylated and/or aminated alkyl oxide having the formula $\text{OR}_1(\text{OH})_n(\text{NR}_2\text{R}_3)_m$ where n and m are each independently numbers ranging from 0 to 10, R₁ is an alkyl group having 1 to 7 carbon atoms; R₂ and R₃ are each independently hydrogen or an alkyl group such that the sum of the carbon atoms of R₂ and R₃ ranges from 1 to 7; primary, secondary or tertiary amine having the formula NR₂R₃ where R₂ and R₃ have the meaning indicated above; and

(3) combinations thereof.

10. (Previously Presented): The nanoemulsion according to Claim 1, wherein said nanoemulsion comprises at least one copolymer of polyvinyl methyl ether and said

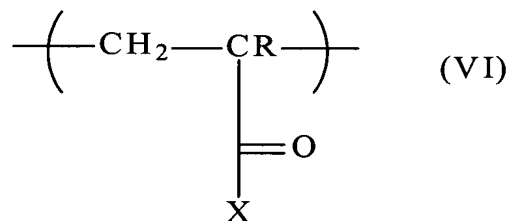
copolymer of polyvinyl methyl ether is a copolymer of vinyl methyl ether and one or more of the following monomers:

- vinyl alkyl ethers of formula (V):



in which R is selected from the group consisting of alkyl groups containing from 1 to 7 carbon atoms;

- vinyl acetate;
- N-vinyllactam;
- maleic anhydride; and
- neutral acrylic derivatives of formula (VI):

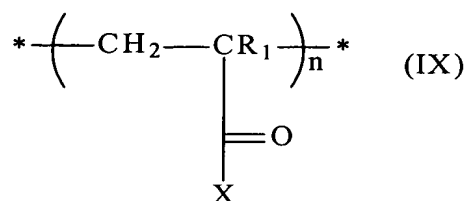


in which R is hydrogen or a methyl group, and X is selected from the group consisting of alkyl oxide having the formula OR' where R' is an alkyl group having 1 to 7 carbon atoms; hydroxylated and/or aminated alkyl oxide having the formula $\text{OR}_1(\text{OH})_n(\text{NR}_2\text{R}_3)_m$ where n and m are each independently numbers ranging from 0 to 10, R_1 is an alkyl group having 1 to 7 carbon atoms; R_2 and R_3 are each independently hydrogen or an alkyl group such that the

sum of the carbon atoms of R_2 and R_3 ranges from 1 to 7; and primary, secondary or tertiary amine having the formula NR_2R_3 where R_2 and R_3 have the meaning indicated above.

11. (Previously Presented): The nanoemulsion according to Claim 1, wherein said nanoemulsion comprises at least one neutral acrylic copolymer or homopolymer and said neutral acrylic copolymer or homopolymer is selected from the group consisting of:

- neutral water-soluble acrylic polymers having the following formula (IX):



in which R_1 is hydrogen or a methyl group, and X is selected from the group consisting of (a) and (b):

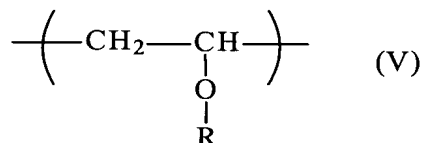
(a) alkylamino groups having the formula NR_2R_3 , wherein R_2 and R_3 are each independently hydrogen or an alkyl group such that the sum of the carbon atoms of R_2 and R_3 ranges from 1 to 7, and wherein the resulting acrylic polymer is water-soluble; and

(b) hydroxylated and/or aminated alkyl oxide groups having the formula $OR_2(OH)_n(NR_3R_4)_m$, wherein n and m are numbers ranging from 0 to 10, R_2 is an alkyl group having from 1 to 7 carbon atoms, R_3 and R_4 are each independently hydrogen or an alkyl group such that the sum of the carbon atoms of R_3 and R_4 ranges from 1 to 7, and wherein the corresponding acrylic polymer is water-soluble;

- copolymers of an acrylic polymer of formula (IX) and one or more of the following neutral monomers:

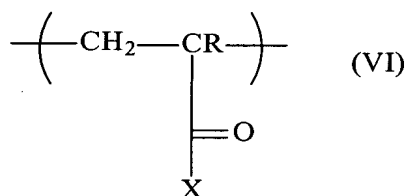
- vinyl acetate;

- N-vinyl lactam;
- maleic anhydride;
- vinyl alkyl ethers of formula (V):



in which R is selected from the group consisting of alkyl groups containing from 1 to 7 carbon atoms;

- neutral acrylic derivative of formula (VI):



in which R is hydrogen or a methyl group, and X is selected from the group consisting of alkyl oxide having the formula OR' where R' is an alkyl group having 1 to 7 carbon atoms; hydroxylated and/or aminated alkyl oxide having the formula $\text{OR}_1(\text{OH})_n(\text{NR}_2\text{R}_3)_m$ where n and m are each independently numbers ranging from 0 to 10, R_1 is an alkyl group having 1 to 7 carbon atoms; R_2 and R_3 are each independently hydrogen or an alkyl group such that the sum of the carbon atoms of R_2 and R_3 ranges from 1 to 7; and primary, secondary or tertiary amine having the formula NR_2R_3 where R_2 and R_3 have the meaning indicated above.

12. (Canceled).

13. (Previously Presented): The nanoemulsion according to Claim 1, wherein said water soluble nonionic polymer (ii) present in said nanoemulsion is hydroxypropyl guar.

14. (Original): The nanoemulsion according to Claim 1, wherein said water-soluble nonionic polymer is present in an amount ranging from 0.01 to 20% by weight relative to the total weight of the composition.

15. (Previously Presented): The nanoemulsion according to Claim 1, wherein said nonionic amphiphilic lipid present in said nanoemulsion is one or more selected from the group consisting of:

- (1) silicone surfactants,
 - (2) amphiphilic lipids which are liquid at a temperature of less than or equal to 45°C and which are selected from the group consisting of esters of at least one polyol and of at least one fatty acid having at least one saturated or unsaturated and linear or branched C₈-C₂₂ alkyl chain,
 - (3) esters of fatty acid and of sugar,
 - (4) ethers of fatty alcohol and of sugar,
 - (4) surfactants which are solid at a temperature of less than or equal to 45°C and which are selected from the group consisting of glycerol fatty esters, sorbitan fatty esters, oxyethylenated sorbitan fatty esters, ethoxylated fatty ethers, and 5 ethoxylated fatty esters,
 - (5) block copolymers of ethylene oxide and of propylene oxide,
- and mixtures thereof.

16. (Original): The nanoemulsion according to Claim 1, wherein said amphiphilic lipid (i) is present in an amount ranging from 0.2 to 15% by weight with respect to the total weight of the composition.

17. (Original): The nanoemulsion according to Claim 1, further comprising at least one additional ionic amphiphilic lipid.

18. (Original): The nanoemulsion according to Claim 17, wherein said additional ionic amphiphilic lipid is present in an amount ranging from 0.01 to 10% by weight with respect to the total weight of the composition.

19. (Original): The nanoemulsion according to Claim 1, wherein said oily phase is present in an amount ranging from 2 to 40% by weight with respect to the total weight of the composition.

20. (Original): A cosmetic or dermatological composition, comprising the nanoemulsion as claimed in Claim 1.

21. (Original): An ophthalmic vehicle, comprising the nanoemulsion as claimed in Claim 1.

22. (Original): A pharmaceutical composition, comprising the nanoemulsion as claimed in Claim 1.

23. (Original): A method for caring for, treating, or making up the skin, face, or scalp, comprising applying the nanoemulsion as claimed in Claim 1 to the skin, face, or scalp.

24. (Original): A method for caring for or treating the hair, comprising applying the nanoemulsion as claimed in Claim 1 to the hair.

25. (Original): A method for caring for or moisturizing the skin, mucous membranes, or scalp, comprising applying the nanoemulsion as claimed in Claim 1 to the skin, mucous membranes, or scalp.

26. (Original): A method of making a composition intended for the treatment of dry skin, comprising admixing the nanoemulsion as claimed in Claim 1 with said composition.

27. (Original): A method of making an ophthalmological composition, comprising admixing the nanoemulsion as claimed in Claim 1 with said composition.

28. (Currently Amended): A method for preparing the nanoemulsion as claimed in Claim 1, comprising:

combining said oily ~~phase~~ phase, said aqueous ~~phase~~ phase, and said amphiphilic lipid with high pressure homogenization to obtain a first nanoemulsion, and

thereafter contacting said nanoemulsion with said water-soluble nonionic polymer (ii) to obtain said nanoemulsion as claimed in Claim 1.

29. (Withdrawn): A method for thickening an oil-in-water nanoemulsion having oil globules whose number-average size is less than 100 nm, comprising contacting said nanoemulsion with at least one water-soluble nonionic polymer selected from the group consisting of homopolymers and copolymers of ethylene oxide; polyvinyl alcohols; homopolymers and copolymers of vinylpyrrolidone; homopolymers and copolymers of vinylcaprolactam; homopolymers and copolymers of polyvinyl methyl ether; neutral acrylic homopolymers and copolymers; C₁-C₃ alkyl guar; C₁-C₃ hydroxyalkyl guar; and combinations thereof; wherein the at least one water-soluble nonionic polymer is free of hydrophobic chains.

30. (Withdrawn): The method according to Claim 29, wherein said nanoemulsion further comprises (i) at least one amphiphilic lipid selected from the group consisting of nonionic amphiphilic lipids, anionic amphiphilic lipids, and combinations thereof

31. (Withdrawn): The method according to Claim 29, wherein a ratio of the weight of said oily phase to the weight of said amphiphilic lipid (i) ranges from 1.2 to 10.

32. (Withdrawn): The method according to Claim 29, wherein said thickening comprises increasing the viscosity of said nanoemulsion by at least a factor of 5.

33. (Withdrawn): An oil-in-water nanoemulsion composition, comprising:

an oily phase dispersed in an aqueous phase;

(i) a means for emulsifying said composition; and

(ii) a means for thickening said composition, which is free of hydrophobic chains;

wherein a ratio of the weight of said oily phase to the weight of the means for emulsifying said composition ranges from 1.2 to 10;

and wherein said oily phase comprises oil globules having a number-average size of less than 100 nm.

34. (Previously Presented): The nanoemulsion according to Claim 1, wherein the at least one water-soluble nonionic polymer present in said nanoemulsion is selected from the group consisting of homopolymers of ethylene oxide; polyvinyl alcohols; homopolymers and copolymers of vinylpyrrolidone; homopolymers and copolymers of vinylcaprolactam; homopolymers and copolymers of polyvinyl methyl ether; neutral acrylic homopolymers and copolymers; C₁-C₃ alkyl guar; C₁-C₃ hydroxyalkyl guar; and combinations thereof.

35. (Previously Presented): The nanoemulsion according to Claim 1, wherein the at least one water-soluble nonionic polymer present in said nanoemulsion is selected from the group consisting of polyvinyl alcohols; homopolymers and copolymers of vinylpyrrolidone; homopolymers and copolymers of vinylcaprolactam; homopolymers and copolymers of polyvinyl methyl ether; neutral acrylic homopolymers and copolymers; C₁-C₃ alkyl guar; C₁-C₃ hydroxyalkyl guar; and combinations thereof.

36-38. (Canceled):

39. (Previously Presented): The nanoemulsion according to Claim 1, wherein the water-soluble nonionic polymer is present in an amount sufficient to increase the viscosity of said nanoemulsion by at least a factor of 5.

40. (Previously Presented): The nanoemulsion according to Claim 1, having a turbidity ranging from 70 to 300 NTU.

41. (Previously Presented): The nanoemulsion according to Claim 1, having a turbidity ranging from 70 to 150 NTU.

Application No. 09/903,768

Reply to Official Action of October 20, 2004

42. (Previously Presented): The nanoemulsion according to Claim 1, having a turbidity ranging from 100 to 200 NTU.